

California Regional Water Quality Control Board

Los Angeles Region

Linda S. Adams
Cal/EPA Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger

January 4, 2008

Mr. Chuck Miller USA Gasoline Corporation 905 Rancho Conejo Boulevard Newbury Park, CA 91320

GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR HEXAVALENT CHROMIUM IMPACTED SITES – USA STATION 252, 4418 CENTRAL AVENUE, CAMARILLO (ORDER NO. R4-2007-0019, SERIES NO. 080; CI NO. 9362)

Dear Mr. Miller:

We have completed our review of your application for coverage under the General Waste Discharge Requirements to inject RegenOx and ORC at the site referenced above in Camarillo, California, for groundwater cleanup and remediation.

Since February 1987, various subsurface investigations have been conducted at the subject site subsequent to the tank removal, which consisted of drilling and sampling numerous soil borings, installing fourteen groundwater monitoring wells, MW-1 to MW-14, and three vapor extraction wells, EW-1 to EW-3. The analytical data from groundwater monitoring event conducted in February 2007 indicated groundwater beneath the site was still impacted by total petroleum hydrocarbon (TPHg) (up to 12,000 microgram per litter [μ g/L]) and MTBE (up to 1,100 μ g/L). The Groundwater flow direction underneath the site was to the south at a gradient from approximately 0.03 feet/foot. The groundwater contour and groundwater contaminant plume can be referenced in Figures 4 and 5 in the Monitoring & Reporting Program No. Cl-9362. The site is being regulated by the Ventura County Local Oversight Program.

To remediate residual groundwater contamination, a "Remedial Action Plan" dated March 25, 2007, to inject RegenOx and ORC into groundwater formation through 18 locations on-site (please refer to Monitoring & Reporting Program No. Cl-9362, Figure 6) was proposed. RegenOx is an advanced chemical oxidation technology that maximizes in situ performance by employing a sodium percarbonate complex with a milti-part catalytic formula, and directly oxidizes contaminants. The injection area is to cover the majority of the groundwater contaminants plume except the area that is currently underneath a convenient store.

A letter dated June 12, 2007 from Ventura County Division of Environmental Health (VCDEH) approved the Remedial Action Plan with the condition that the treatment area should cover EW-3. Regional Board staff has reviewed and concurred with the VCDEH's approval of the Remedial Action Plan with the condition that the treatment area should extend to the west to

better cover the groundwater plume (please refer to Monitoring & Reporting Program No. Cl-9362, Figure 6).

Regional Board staff has determined that the proposed discharge meets the conditions specified in Order No. R4-2007-0019, "Revised General Waste Discharge Requirements for Groundwater Remediation At Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites (General WDRs)," adopted by the State Water Resources Control Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of General WDRs Board Order No. 2007-0019 and Monitoring and Reporting Program No. CI-9362 and Standard Provisions. This Waste Discharge Requirements shall not be rescinded without the regulatory oversight agency's prior approval.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019. All monitoring reports shall be sent to the Regional Board, <u>ATTN: Information Technology Unit.</u>

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-9362, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2007-0019 only to the applicant. A copy of the Order will be furnished to anyone who requests it, or on line at: http://www.waterboards.ca.gov/losangeles/html/permits/gen_orders/R4-2007-0019/R4-2007-0019.pdf

If you have any questions, please contact Mr. Rod Nelson at (213) 576-6119.

Sincerely,

CC:

Tracy J. Egoscue Executive Officer

Enclosures: 1. Board Order No. R4-2007-0019

2. Monitoring and Reporting Program No. CI-9362

Mr. David Salter. Ventura County Division of Environmental Health

Mr. Dane Nygaard, Environ Strategy Consultants, Inc.

STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION MONITORING AND REPORTING PROGRAM NO. CI-9362 FOR

USA STATION 252
4418 CENTRAL AVENUE, CAMARILLO
(ORC INJECTION FOR GROUNDWATER CLEANUP)
(ORDER NO. R4-2007-0019, SERIES NO. 080)

. REPORTING REQUIREMENTS

A. USA Gasoline Corporation (hereinafter Discharger) shall implement this monitoring program on the effective date of Regional Board Order No. R4-2007-0019. The first monitoring report under this program, for January-March 2008, shall be received at the Regional Board by April 15, 2008. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring Period	Report Due	
January – March	April 15	
April – June	July 15	
July – September	October 15	
October – December	January 15	

If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.

- B. By March 1st of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall explain the compliance record and the corrective actions taken, or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDRs).
- C. Laboratory analyses all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.

January 4, 2008

- D. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Regional Board Executive Officer (Executive Officer). The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Regional Board.
- E. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.
- F. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- G. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
- H. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- I. If the Discharger performs analyses on any groundwater samples more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report.
- J. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.

K. The Discharger should not implement any changes to the Monitoring and Reporting Program prior to receiving Executive Officer's written approval.

II. ORC INJECTION MONITORING REQUIREMENTS

The quarterly reports shall contain the following information regarding injection activities:

- 1. Location map showing injection points, used for the RegenOx and ORC (refer to attached Figure 4 for groundwater contour, Figure 5 for groundwater contaminant plume, and Figure 6 for the eighteen proposed injection locations, I-1 to I-18).
- 2. Written and tabular summary defining the quantity of RegenOx and ORC injected per month to the groundwater and a summary describing the days on which the injection system was in operation.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total RegenOx and ORC delivered per injection point	grams/day		Quarterly

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site. Groundwater samples shall be collected from groundwater monitoring wells EW-2 (up-gradient), RW-3 (source area), MW-11 and MW-12 (down-gradient) on a quarterly basis to monitor the effectiveness of the in-situ groundwater remediation (refer to attached Figure 5). RegenOx and ORC injection points shall not be used as monitoring points. Groundwater shall be monitored for the duration of the remediation in accordance with the following discharge monitoring program:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd)	µg/L	Grab	Quarterly ¹
Benzene, Toluene, Ehylbenzene, Xylenes (BTEX)	μg/L	Grab	Quarterly ¹

			The second secon
Methyl tertiary butyl ether	μg/L	Grab	Quarterly ¹
(MTBE), Tertiary butyl alcohol		•	
(TBA), Tertiary amyl methyl			
ether (TAME), Di-isopropyl ether			
(DIPE), ether (ETBE)		a	
Ethanol	μg/L	Grab	Quarterly ¹
Formaldehyde			
Acetone			
Total dissolved solids	mg/L	Grab	Quarterly ¹
Arsenic			
Boron			
Chloride			•
Bromide .		*	
Sulfate			
Oxidation-reduction potential	milivolts		Quarterly ¹
Dissolved Oxygen	μg/L	Grab	Quarterly ¹
Dissolved ferrous iron	μg/L	Grab	Quarterly ¹
Total Chromium and chromium	μg/L	Grab	Quarterly ¹
six ²	μg/ <u></u>	·	- Quartony
PH	pH units	Grab	Quarterly ¹
Temperature	°F/°C	Grab	Quarterly ¹
Groundwater Elevation	Feet, mean sea	In situ	Quarterly ¹
	level and below		
	ground surface		· · · · · · · · · · · · · · · · · · ·

One week <u>before</u> injection and Quarterly thereafter

All groundwater monitoring reports must include, at a minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Quarterly observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped

² The Discharger is required to monitor for total chromium and chromium six in the baseline, second and fourth quarterly sampling. If detected at any of these sampling events, the total chromium and chromium six must be monitored quarterly thereafter.

by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the _	day of		at	
		.	· · · · · · · · · · · · · · · · · · ·	(Signature
•			·	(Title)"

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:

Tracy J. Egoscue Executive Officer Date: January 4, 2008





